

1863.

THE PITTS'

AGRICULTURAL WORKS

BUFFALO, N. Y.

MANUFACTORY OF

IMPROVED

Threshing Machines
AND

HORSE POWERS,

PORTABLE STEAM ENGINES, &c.

BRAYLEY & PITTS, Proprietors.

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ELMA NEW YORK USA*

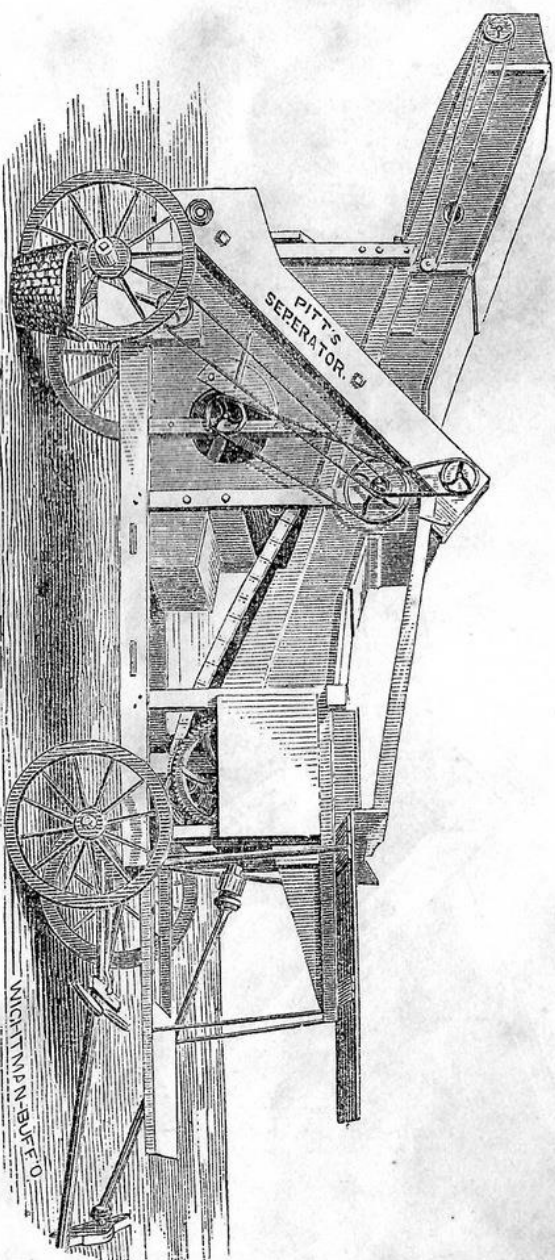
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FOR COMMERCIAL GAIN.*

GOLD MEDALS AWARDED



For the Best Thresher and Cleaner in the World.

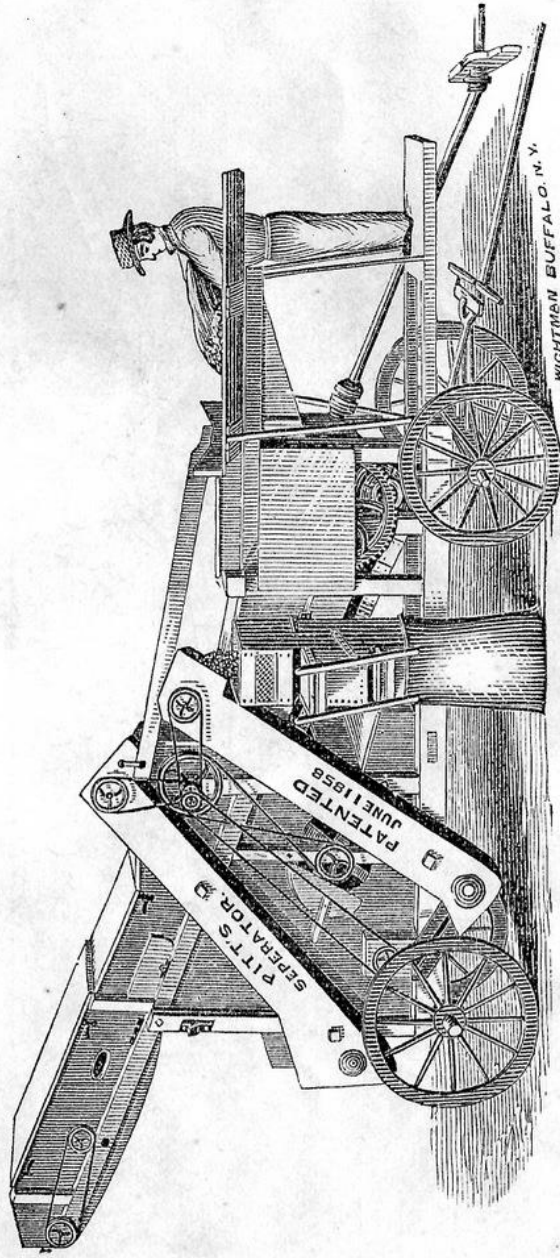
THE
PITTS' AGRICULTURAL WORKS,
BUFFALO, N. Y.



PITTS' SEPARATOR IMPROVED.—Style of Eight or Ten Horse.

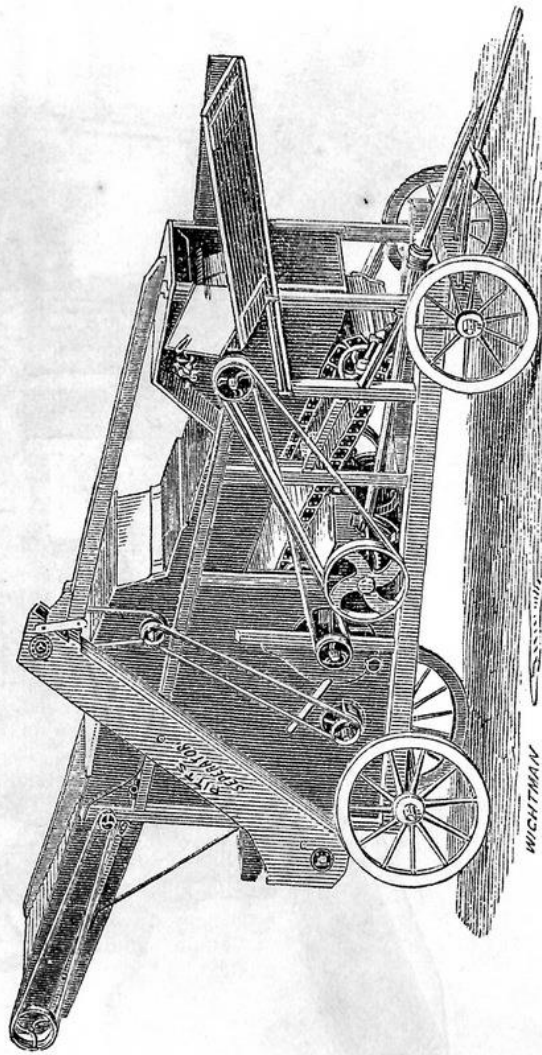
PITTS' SEPARATOR, IMPROVED,

With Attachment for Measuring and Registering and Bagging the Grain.



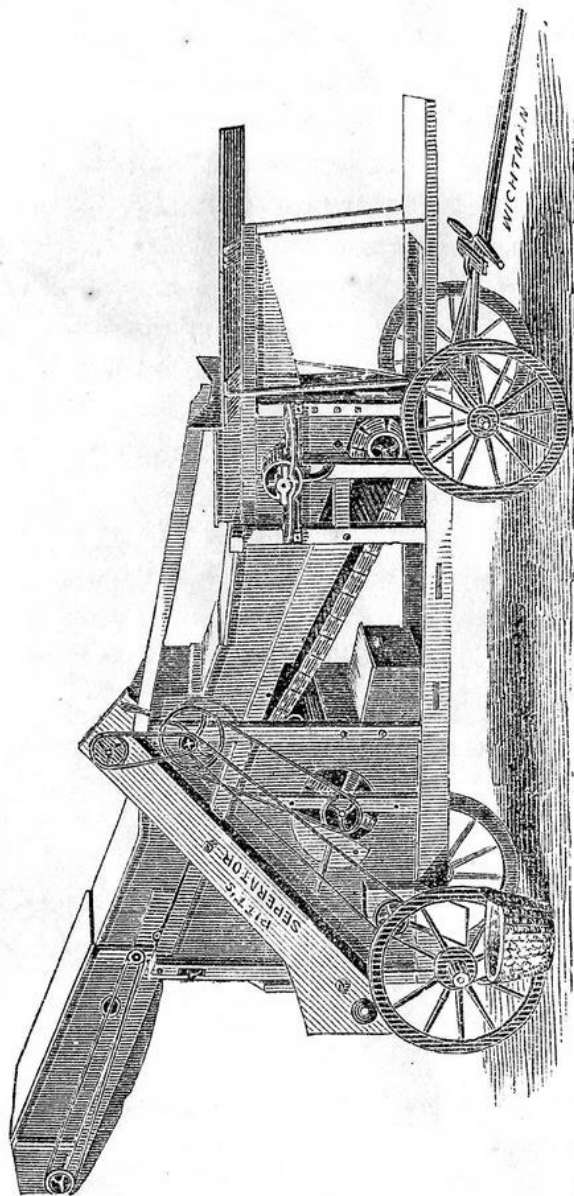
STYLE OF EIGHT OR TEN HORSE.

PITTS' SEPARATOR, IMPROVED.



STYLE OF FOUR OR SIX HORSE.

PITTS' BAND SEPARATOR.



STYLE OF EIGHT OR TEN HORSE.

INTRODUCTORY REMARKS.

Owing to the great advance in the cost of materials, we, in common with other manufacturers, have been compelled to advance the prices of our machines. You will see that the advance is not in proportion to the actual increase of the cost of labor and materials. We wish to sell machines at the lowest prices that they can be afforded at, believing it is of more importance for farmers to see that the implement they are about buying is well made and finished up in the best manner; that the materials are of the best quality—in fact all of the first class, both in the manufacture and in the perfect operation of the same, than to look for low prices in preference to a good article.

The celebrated Pitts' Threshing Machine to which your attention is called, was invented by John A. and Hiram A. Pitts, then of Winthrop, Maine, and was patented by them in 1837. They continued to manufacture, and to perfect the working of the machine, up to the time of their decease. It was the first and is the only successful machine, for threshing and cleaning grain at one operation, up to the present time. John A. Pitts established manufactories at various places; the last one, in 1851, at Buffalo, N. Y., considering it to be the very best point in the country for his business. Here can be obtained the best quality of lumber and iron, very important items in making a substantial and durable Threshing Machine. Here, also, is the most convenient point for shipping to any section of the country.

This celebrated Machine, with the improvements that have been added, is now the most perfect Thresher and Cleaner at one operation in the world. The increasing demand has always been greater than the supply, and yet for the last ten years this concern has manufactured nearly double the number of any other concern in the country. This Machine is now in use in several places in Europe, in Australia, in South America, and in California the demand is greater than for all other machines combined. They are in universal use in every grain-growing State. All who are engaged in manufacturing a good Threshing Machine, must of necessity endeavor to imitate this. Of course parties about purchasing, and who desire to get the best Thresher, prefer to get one from the original manufactory, knowing that they can be relied on as the very best Machines in the world.

A WORD TO THE WISE.

Manufacturers are making Machines in imitation, and some of them have even advertised their Machines as the Pitts' Machine. We know that they do all make after the Pitts' style or arrangement for separating, but this does not constitute a genuine Pitts' Separator. Parties who want to buy a reliable Thresher and Cleaner, should send in their orders early to some one of our authorized agents, or directly to us, and we will return them full information, and also give them the name of our nearest agent.

THE MOST SUBSTANTIALLY BUILT THRESHER IN THE WORLD.

It is of the most importance that the frame work should be of good materials and well put together ; that the joints should be well fastened with bolts ; that it should not shake or tremble while running ; that a firm, stiff frame, is very necessary to a good easy-running machine. In all these points this machine has a decided superiority over all others. We spare neither labor nor expense to make our work of the highest order, and in appearance our machines are probably all that any one can desire.

TESTIMONIALS.

We do not propose to array a long list of what is purported to be extracts from letters, recommends, &c. We might take the same course as others in this respect, but do not consider it necessary. We probably received more letters from influential farmers and threshers, in regard to the successful operation of our machine for the past season, than any other maker in the country. Knowing that most parties who purchase Threshers depend on their own judgment and experience in the matter, we trust to the merits of our machine for a large and increasing demand each successive year.

1863.

Pitts' Separator Improved,

WITH PATENT CLEANER,

INTRODUCED IN ALL OUR MACHINES, PLACES THEM FAR AHEAD OF ANY OTHER.

It is conceded by manufacturers and threshers that the Pitts' Patent Threshing Machine is the only really successful and economical machine ever introduced. It was awarded, at the World's Fair in France, a *Gold Medal* of Honor. Also, at every exhibition, when brought into competition with other machines, its superiority has been universally acknowledged, and in nearly every instance the first premium has been awarded it. We might go back over the past fifteen years, and enumerate the numerous premiums. It is not now necessary. The reputation of the genuine Pitts' Machine is too well established to need this kind of matter for its introduction. Various manufacturers claim that they are making a machine nearly as good as ours. We say to the friends of the Pitts' Machine, be sure and get one manufactured at the Pitts' Agricultural Works, Buffalo, N. Y. The Separator for the coming season will be superior in every respect to any ever before made. We are determined to spare nothing that will add to its durability, effective operation, or style of finish. This machine can not be surpassed in the genuine qualities of durability, ease of draft, and the thorough and effective manner of its operation. In their construction none but the very best selected materials are used, the joints are all well fastened with bolts, cast steel shafts in cylinders, babbett metal in boxes where necessary, and everything is got up in the very best manner throughout, and furnished with belts, platform for feeder to stand on, run boards for convenience of oiling, feed tables, a tool box, and sieve for wheat, barley and oats, screen, &c. : except the Four or Six Horse Separators—those are without run boards or table for feeder to stand on.

We are building different sizes, of suitable capacity for four, six, eight or ten horse power. Either size can be adapted to be driven with gear or band, by horse, steam or water power, requiring about 1300 revolutions per minute.

These machines are all warranted to be well made, and of good materials, and, if properly managed, to give entire satisfaction in their operation.

PRICES.

Four Horse Separator, Geared,	.....	\$175.00, Cylinder 24 inches long.
“ “ “ with Pulley for Belt,	.....	150.00, without jack or main belt.
Six “ “ Geared,	.....	200.00, Cylinder 28 inches long.
“ “ “ with Pulley for Belt,	.....	175.00, without jack or driving belt.
Eight “ “ Geared,	.....	230.00, Cylinder 32 inches long.
“ “ “ with pivot bearing for Cylinder and Pulley for Belt,	.....	200.00, without jack or driving belt.
Ten “ “ Geared,	.....	255.00, Cylinder 36 inches long.
“ “ “ with pivot bearings for Cylind- der and Pulley for Belt,	.....	225.00, without jack or driving belt.

The jack belt, or main driving belt for Eight Horse Band Machine, is 5 inches wide and 40 feet long, single.

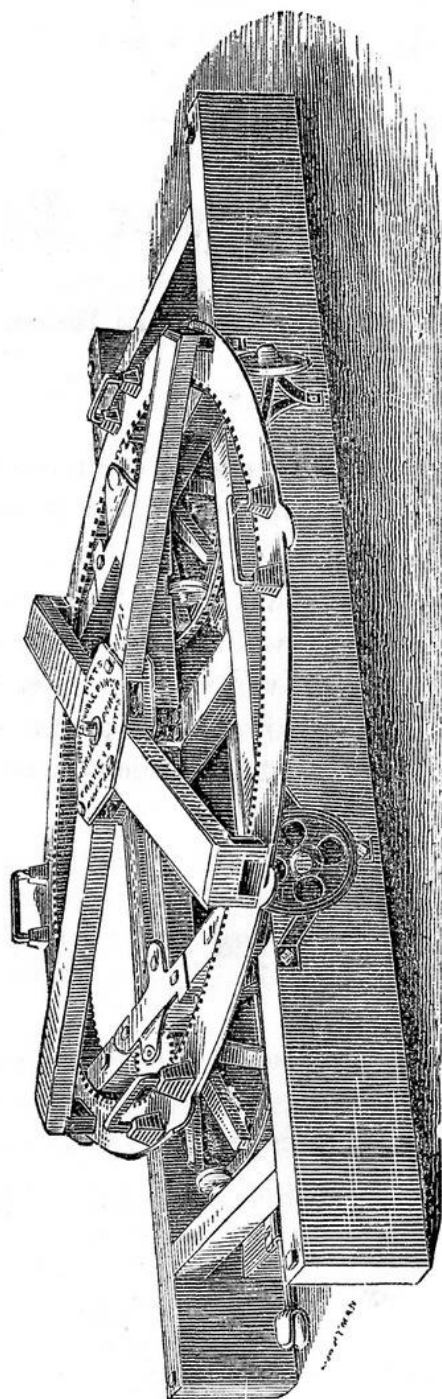
The jack belt, or main driving belt for Ten Horse Band Machine, is 5½ inches wide and 40 feet long, single. Extra length above 40 feet. will be charged extra at Manufacturer's prices.

DIRECTIONS.

For successfully running and keeping in order, the machine should sit level. Look across on the sills, and have them range one with the other: this will save your journals and boxes from cutting. Keep all the oil holes open, so that the oil can get to the journals. The cylinder boxes should be taken apart and cleaned once every day. Attend to your belts, that none of them slip. To soften your rubber belts use linseed oil, (*animal oil will spoil them;*) on your leather belt use currier's oil.

Do not allow the dust to accumulate inside the cylinder, it will get it out of balance. Brace the Separator, by setting props in the castings on the back part of the fan mill, and putting blocks between the bolster and axle at front end.

The successful operation of the machine very much depends upon proper attention to all the details, and in properly feeding it, in keeping up regular speed, &c. An experienced thresher readily detects any variation in this respect. *Don't keep stuffing in the straw when the speed is down.*



OUR IMPROVED PATENT DOUBLE PINION HORSE POWER.

We make of different sizes, viz.: for Four, Six, Eight, or Ten Horses.

OUR IMPROVED

CARY PATENT

Double Pinion Horse Power,

Is the Standard Power amongst Farmers and Threshers.

It is celebrated for great simplicity, ease of draft, or effective power; costs less than any other to keep in repair, and is very strong and durable.

Our two Horse Power is particularly well adapted for small jobs of threshing, or for sawing of wood, cutting of hay or straw, grinding of feed for fodder, &c., or for any of the various requirements about a farm, and for any other machinery that admits of being driven by horse power: it must, of course, take the place of the endless chain power, being about fifty per cent. more effective.

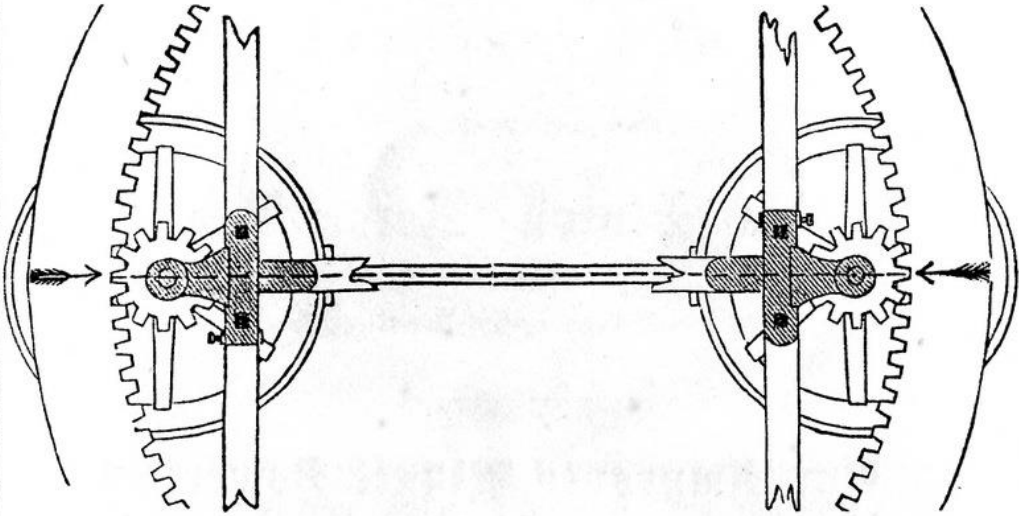
Our four, six, eight or ten Horse Powers are well adapted for driving any kind of machinery, but more particularly threshing Machines.—These Powers are all warranted of sufficient strength for the power at which they are rated.

PRICES.

Two Horse Power, with 1 tumbling rod, brace rods, &c.	\$95 00
Four " " " 2 " " sweeps,	100 00
Six " " " 2 " " " "	100 00
Eight " " " 2 " " " "	120 00
" with master wheel for five sweeps,	130 00
Ten Horse Power with 2 tumbling rods, brace rods, sweeps,	145 00

DIRECTIONS

FOR PUTTING IN RUNNING ORDER

**Our Improved Double Pinion Horse Power.**

1st. Observe that one tooth of each pinion is brought in line. Then put on the master wheel, bringing the points of the arrows pointing to the central tooth in the pinions (as shown by the dotted line in the engraving.) If, however, one tooth of each pinion does not come in line as above, you must set one in line, then go to the other end, and take off the traverse roll that holds the bevel wheel down; then raise the wheel out of gear, and swing it round until one tooth of the pinion comes into line with the other. It is most convenient to do this at the coupling end.

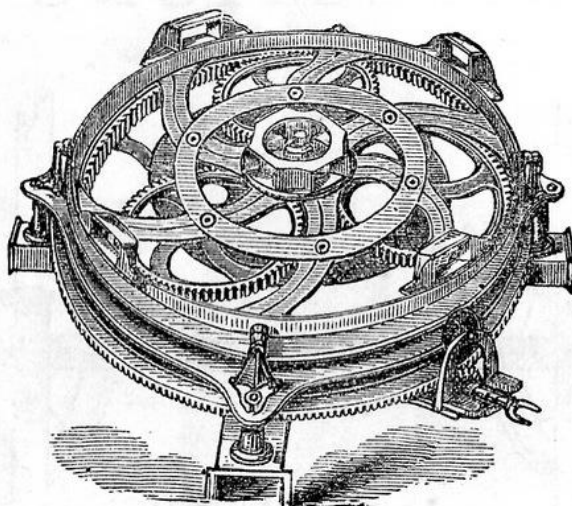
2d. Have those pinions mesh up close into the master wheel, and the bevel wheels down snug into the line shaft pinions. This is done by the step at the bottom, or cap piece at the top, observing at the same time that the hub of the bevel wheel is kept in its proper perpendicular position.

The power should be set level and firmly staked.

Keep all the bearings well oiled: *do this when not in motion.*

By attending to these directions, and exercising proper care, you will save much expense in repairs, as well as a vast amount of friction, thereby adding to the effective power to be applied.

The levers, or sweeps, should be 13 feet long, 4 x 5 inches, strong but light as possible.



Our Improved Planet Power,

Patented March, 1858,

MADE ENTIRELY OF IRON,

Is unquestionably the very best iron Horse Power made. Great compactness and ease of running are fully established, and it has in every instance given the most perfect satisfaction. Capacity for four, eight or ten horses.

PRICES.

Four Horse	.....	\$100 00
Eight "	.....	120 00
Ten "	.....	130 00

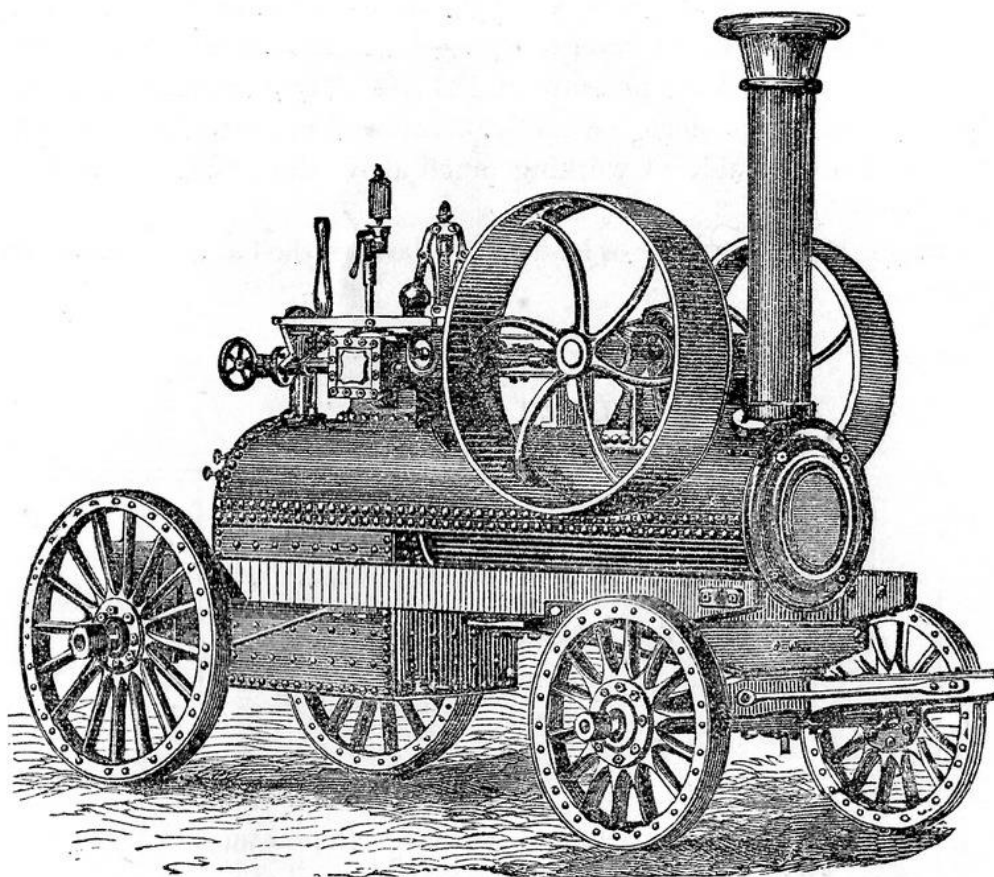
HELEY'S EQUALIZER.

PATENTED SEPTEMBER 14TH, 1858, AND FEBRUARY 15TH, 1859.

This is a very great improvement, to be attached to Horse Powers, for equalizing the draft of horses, and the strain on the power; can be easily attached to any Horse Power. It has been very successfully and thoroughly tested.

Price for two sweeps	.....	\$15 00
" four "	.....	20 00
" five "	.....	25 00

See cut of above on 3d page of cover.



PORTABLE STEAM ENGINES.

On Wheels, it so Ordered.

From eight to twelve horse power, for driving Threshing Machines, Saw Mills, Ore Washers, Pumping, Pile Driving, &c., and suitable for all kinds of plantation and farm use. They are in every respect a reliable, easily managed *Farm Engine*.

The size of Engine particularly adapted for driving our Eight Horse Thresher is the seven inch bore and ten inch stroke : the boiler has a larger fire surface than is usually rated for Eight Horse Power.

The size of Engine adapted to drive our Ten Horse Thresher, is the eight inch bore and twelve inch stroke. These Engines are very compact and complete, having a feed-water Heater, Force Pump, Regulator, Belt Pulley, turned on the face, Steam Gauge, &c.; and are adapted for burning either wood or coal. The boilers are of best American

iron, strong, well made, and supplied with fusible safety plug; and warranted to bear a cold water test pressure of 200 lbs. per square inch, and a constant working pressure of 120 lbs. They embrace the principles of the best modern locomotives, are well made without finish to show, and are capable of working much above the power inserted in the table below.

Driving Belts of rubber or leather will be furnished at manufacturer's prices.

PRICES.

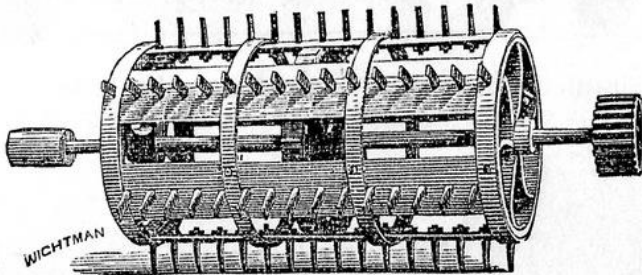
CYL.		BOILER.									Weight, pounds	Horse Power.	PRICE, CASH.
Diameter.	Stroke.	Waist, Diam.	FIRE BOX.			TUBES.			Grate Surf. Sq. feet.	Fire Surface. Sq. feet.			
			L.	W.	H.	No.	Diam.	Lgth.					
7	10	26	36	22	28	29	2 $\frac{1}{4}$	48	5 $\frac{1}{2}$	100	4500	8	
8	12	29	39	25	33	34	2 $\frac{1}{4}$	60	6 $\frac{3}{4}$	139	5800	12	

A good strong Wagon, suitable for hauling from place to place, will be supplied, if ordered, at a reasonable price, extra.

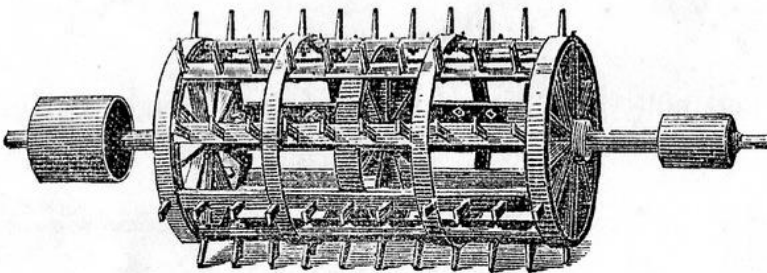
TERMS.

Net cash, or half cash; half, four months approved paper, payable at bank, interest added; note bearing date of bill of lading. Satisfactory reference required before shipment.

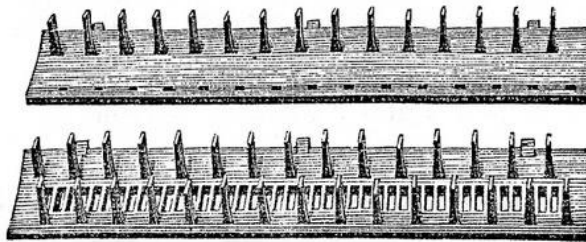
Parts of Threshing Machine.



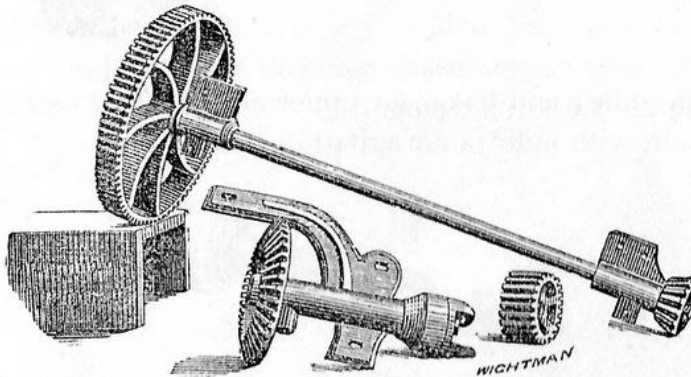
Cylinder complete with spur pinion and pulley on the shaft



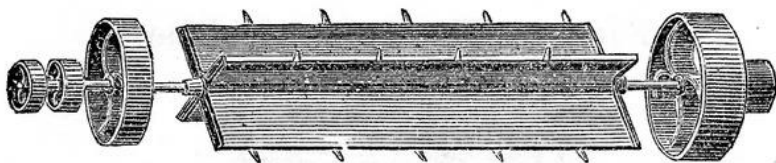
Bar Cylinder with pulleys for Belt; *steel pivots.*



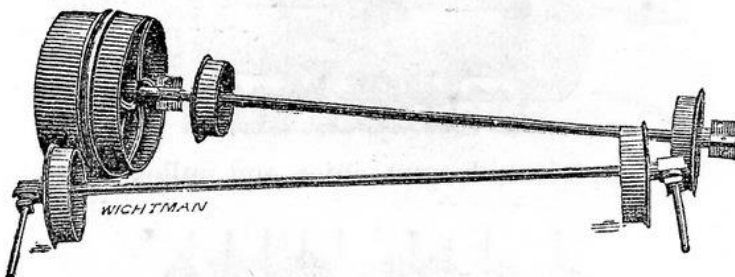
Upper and lower concaves complete.



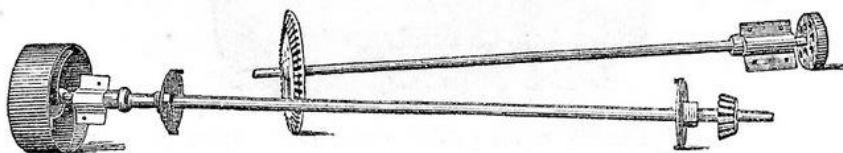
Cross shaft, with boxes, spur wheel, and bevel pinion. Spur pinion. Side gear pipe box, with bevel wheel. Snap coupling and shaft complete.



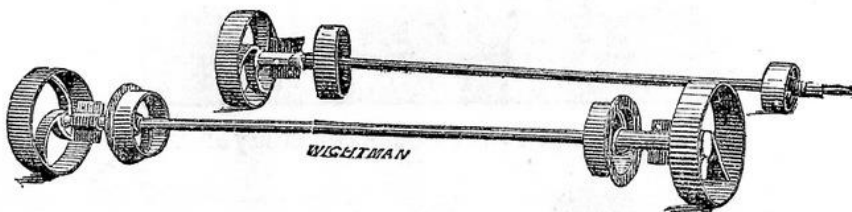
Beater complete, with pulleys on shaft. Eight or ten horse.



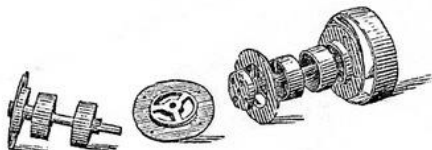
Shafts and pulleys for grain belts, or belt of troughs and cells, with boxes on shafts.



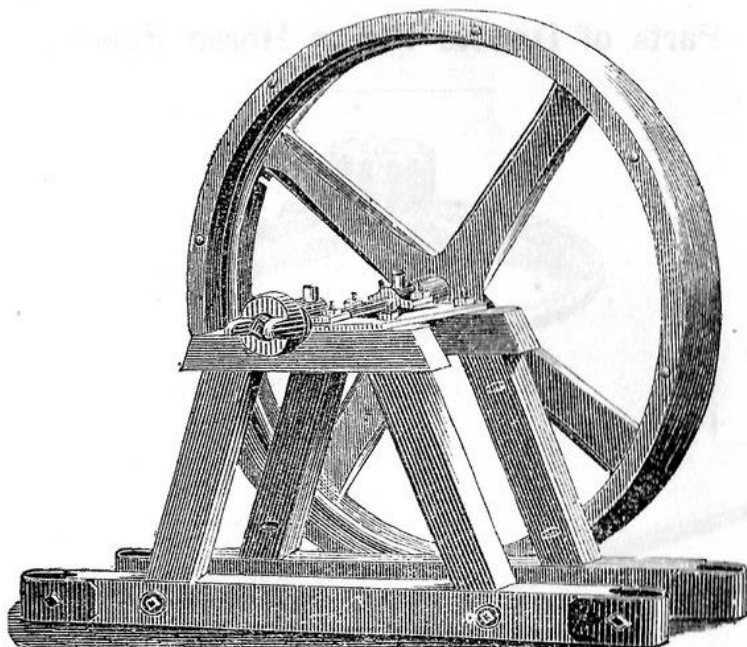
Fan shafts, with pulleys and box, and heads for cross arms of fans, and fan pinion. Fan side shaft, with fan gear, box, and shaker iron.



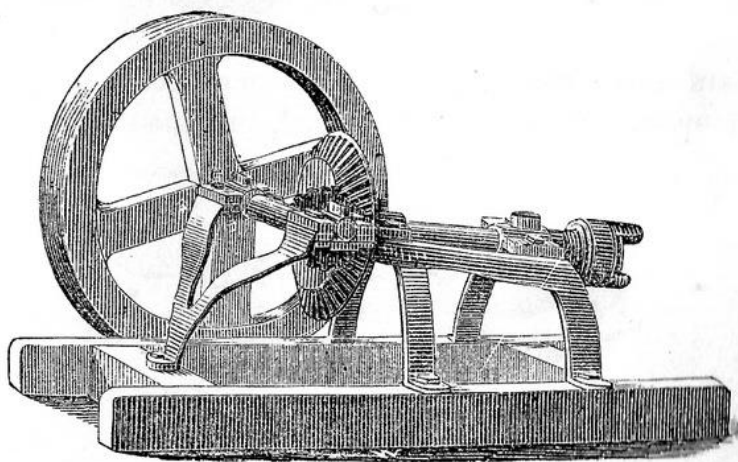
Shaft, with pulley and boxes for upper end of straw carriers, or open raddle. Shaft, with pulleys for agitating open carrier.



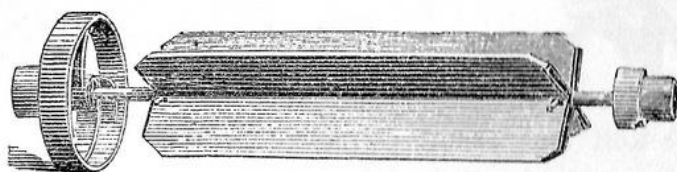
Elevator pulley, with shaft, rolls, boxes, and shaker iron for upper end. Shaft rolls and boxes for lower end of do.



Large Band Wheel Jack, without Gearing.

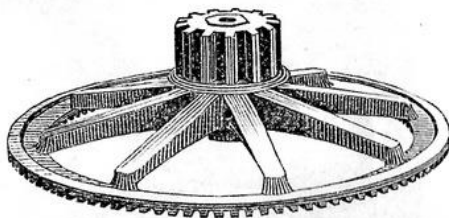


Iron Frame Jack, with reversible band wheel, for running with a straight or a cross band.

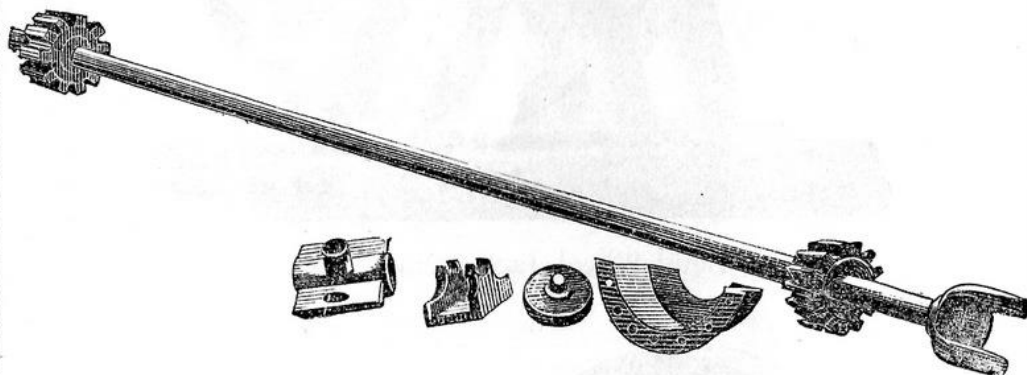


Beater, complete, with pulleys on shaft, style for four or six horses.

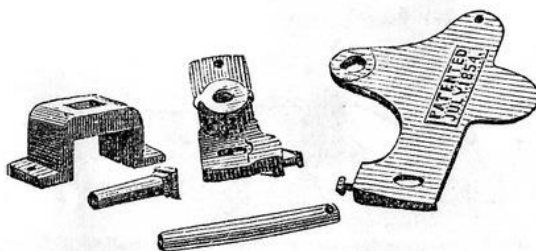
Parts of Double Pinion Horse Power.



Bevel wheel and bull pinion.



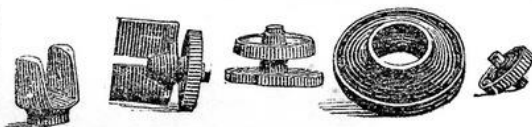
Line Shaft, with pinions and coupling complete. Oil cup for under line shaft pinions. Friction roll and stand, and line shaft box.



Cap piece over bevel wheel. Step under bevel wheel. Bevel wheel pin or journal. Center pin, and stand for master wheel.



New style Roll and Stand for under master wheel. This dispenses with the cross-piece.



Roll for under master wheel, end of cross-piece. Traverse rolls and stands over bevel wheel, and coupling jaw.

1863.
LIST OF PRICES
OF
Threshing Machines, Horse Powers,
PORTABLE STEAM ENGINES, &c.
AT BUFFALO, N. Y.

Delivered free on Boats or Cars, but subject to Freight, (and Insurance, when necessary.)

For Four Horse Power and Separator, Cyl. 24 in. long,	\$275 00
For Six do. do. do. Cyl. 28 in. long,	300 00
For Eight do. do. do. Cyl. 32 in. long,	350 00
For Eight do. do. and master wheel for five sweeps, -	360 00
For Ten do. do. and Separator, Cyl. 32 in. long,	375 00
For Ten do. do. do. Cyl. 36 in. long,	400 00

This includes sweeps and all of the belts for Separator.

With a Band Machine we furnish forty feet of driving belt, any extra length will be charged for extra.

The prices of Geared or Band Machines with Jack and forty feet of driving belt, are the same.

Eight and Ten Horse Machines are furnished with a platform for feeder to stand on, run boards for convenience of oiling, &c.

If sweeps are not wanted, their price will be deducted—\$1.00 each.

The Threshing Cylinder, for four horses, is 24 inches long; for six horses is 28 inches long; for eight horses is 32 inches long; for ten horses is 36 inches long. The Separator of each is four inches wider than the length of cylinder.

We also furnish, when expressly ordered, a Truck Wagon suitable for hauling Separator or Horse Power, extra \$35 00

With iron arms or skeins,	40 00
do. do. do. do. 5th wheel, reach &c.,	55 00
Jack without belt, wood frame,	15 00
do. do. do. with reversible pulley, iron frame	20 00
do. do. do. with large band wheel without gearing	15 00
Straw Stacker, 22 feet long, complete,	30 00
Parts of Straw Stacker.—Irons complete, with chain	12 00
“ “ “ Belt, with slats complete,	12 00

Straw Stacker, 16 feet long, complete,	\$22,00
Parts of Straw Stacker.—Irons complete,.....	10 00
“ “ “ Belt, with slats,.....	9 00

Belting of Leather or Rubber at Manufacturer's prices, which are fluctuating.

TERMS OF PAYMENT ON MACHINES.

One-half in cash, and the balance may be payable November 1st, 1864. For all cash, 7 per cent will be allowed on gross amount of sale. All notes to be on interest, and in all cases we require two or more responsible signers, with satisfactory reference.

Patented June 1st, 1858.

Attachments for Measuring and Registering the number of bushels threshed, and for putting the same in bags.

Price, complete,.....\$25 00

This improvement will save one hand, and is particularly well adapted for out-door threshing, as it saves all the grain much more effectually than in the usual way—*none can be lost*. It also enables the thresher to make a settlement when his work is done.

In ordering repairs, please state whether for Horse Power or Separator, and what part of either they are to go on; also, what size, whether 4, 6, 8, or 10 Horse, and how it is driven, with gear or belt, and the year it was made in, together with such other information as will insure the right article to be sent. Money should in all cases accompany the order; if it does not, we will send to nearest express office and collect on delivery.

Repairs for Four or Six Horse Separator.

Cylinder, complete, 24 inches long,.....	\$25 00
do. do. 28 inches long,.....	30 00
Cylinder Boxes, not lined, each,.....	1 00
Concaves, each,.....	1 50
Apron or Grain Belt,.....	16 00
Straw Belt,.....	4 00

Elevator Belt, with buckets complete	\$ 5 00
Shoe, with sieves and screen complete	14 00
Sieves for wheat or oats, each	2 00
do. barley "	2 00

For other parts see list of prices for Eight Horse Separators.

For Repairs on Eight Horse Separator.

Cylinder complete, 32 in. long	\$35 00
Cylinder Boxes, lined with Babbett, each	1 50
do. do. Brass for Pivot each	3 00
Cylinder Heads, each	2 50
Cylinder or Concave Teeth, per dozen	1 50
Concaves each, without Teeth	1 75
Conveyer Boxes each	30
Sections of Conveyer Screws, each	25
Apron, or Grain Belt, 37½ in. wide	25 00
Straw Belt, do. do.	6 00
Elevator for returning tailings, complete	14 00
Elevator Pulley	50
Elevator Boxes, top or bottom, each	50
Elevator Rolls, with shaft top or bottom, each	75
Elevator Belt, with buckets, complete	6 00
Fan Boxes, pulley end	30
Fan Boxes, gear end	25
Fan Wheel	1 00
Fan Pinion	50
Fan Shaft	2 50
Fan Side Shaft Box, shaker end, (Babbett,)	50
Fan Side Shaft, or Shaker Shaft, for Shoe	2 50
Fan Side Shaft Box, gear end	25
Shoe, with Sieves, complete	18 00
Wheat or Oat Sieves, each	2 50
Barley Sieve	2 50
Screens, each	2 00
Casting for Shaking Shoe on end of side shaft	25
Spur Wheel for driving Cylinder	5 00
Spur Pinion on Cylinder Shaft	1 00
Bevel Wheel on Separator	2 50
Bevel Pinion on Separator	1 00
Cross Shaft under Cylinder	4 50
Cross Shaft Boxes, each	1 00
Side Gear Pipe Box	3 00
Side Gear Shaft	2 50
Snap Coupling, complete	2 00
Snap Coupling, alone	50
Snap Coupling Hub to Key on Shaft	1 00

Snap Coupling Catch	\$ 0 25
For each of the Small Boxes in Separator	25
Pulley, 12 in. diameter, 4 in. face	1 75
Other Pulleys, 10 or 12 in. diameter, each	1 25
Pulleys less than 10 in. diameter, each	50

In ordering Pulleys, mention the size, the width of face, and what Shaft it is to go on, and if for Four, Six, Eight or Ten Horse Separator.

Repairs on Ten Horse Separator.

Cylinder complete, 36 in. long	\$40 00
Cylinder Boxes, lined with Babbett, each	1 50
do. do. Brass for Pivot, each	3 00
Apron, or Grain Belt, 41½ in. wide	26 00
Straw Belt, 41½ in. wide	6 00
Concaves, each	2 00
Wheat Sieves, each	2 50
Oats Sieves, each	2 50
Barley Sieves, each	2 50
Screen	2 00

See list of prices in Eight Horse Separator for all other parts.

Repairs on Double Pinion Four or Six Horse Power.

Master Wheel, complete,	\$22 00
Master Wheel Rim	16 00
Rolls and Stands under Master Wheel, each	1 25
Bull Pinions, each	1 00
Bevel Wheels, bored each	5 00

See list of prices in Eight Horse Double Pinion Power for all other parts.

Repairs on Double Pinion Eight Horse Power.

Master Wheel, complete,	\$28 00
Master Wheel for five sweeps	32 00
Master Wheel Rim,	22 00
Small Friction Rolls, each	25
Small Friction Roll Stands	25
Large Rolls on cross-pieces, each	50
New style Rolls and Stands, per set, with bolts	7 00
“ “ Rolls, each	50
“ “ Pins, each	25
“ “ Stands, each	1 00
Centre-Piece for arms of Master Wheel	3 50
“ “ “ “ “ five sweeps	5 00

Center Pin for Master Wheel	\$ 0 25
Bull Pinions, each	1 75
Bevel Wheels, bored, each	6 00
Line Shaft, or Bevel Wheel Pinions, each	1 00
Traveler and Stand over Bevel Wheel	1 00
Traveler, alone, over Bevel Wheel	25
Traveler Pin over Bevel Wheel	25
Bevel Wheel Pin or Journal (cast steel)	1 50
Step Casting, Bevel Wheel rests on	1 25
Cap, holds Pin of Bevel Wheel at top	1 50
Line Shaft, with Pinions and Boxes complete	9 00
Line Shaft Boxes, each	1 00
Oil Cups under Pinions, each	25
Tumbling Rods, 12 ft. long,	5 50
Tumbling Rods, 9 ft. long	4 00
Tumbling Rods, 7 ft. 6 in. long	3 50
Coupling Jaws, each	35
Coupling Rings, each	35
Coupling Pins, each	10
Levers, per set	4 00
Drafts Rods for Levers, each	85
Brace Rods for Levers, each	50
Draft Hooks for end of Levers,	60
Draft Hooks for Rods	40

Repairs on Double Pinion Ten Horse Power.

Master Wheel, complete, banded,	\$36 00
Master Wheel Rim, banded,	30 00
Center-Piece for arms of Master Wheel,	5 00
Center Pin for Master Wheel	25
Centre Pin Stand	75
Friction Rolls, each	25
Friction Roll Stands, each	25
Large Roll, on cross-piece, each	50
New style Rolls and stands, per set with bolts	7 00
“ “ Rolls, each	50
“ “ Pins, each	38
“ “ Stands, each	1 25
Bull Pinions, each	2 00
Bevel Wheels, bored, each	6 50
Line Shaft, or Bevel Wheel Pinions, each	1 00
Traveler and Stand over Bevel Wheel, each	1 00
Traveler alone, over Bevel Wheel	25
Traveler Pin over Bevel Wheel	25
Bevel Wheel Pin or Journal (cast steel)	1 50
Step Casting, Bevel Wheel rests on	1 25
Cap holds Pin of Bevel Wheel at top	1 50
Line Shaft, with Boxes and Pinions, complete	11 00

Line Shaft Boxes, each	\$ 1 00
Tumbling Rods, 12 ft. long, each	6 50
Tumbling Rods, 9 ft. long, each	4 50
Tumbling Rods, 7 ft. 6 in. long, each	4 00
Coupling Jaws, each	40
Coupling Rings, each,	40
Coupling Pins, each	12
Levers, per set	5 00
Draft Rods for Levers, each	85
Brace Rods for Levers, each	50
Draft Hooks for end of Levers, each	60
Draft Hooks for end of Rods, each	40

Repairs on Planet Power, Eight or Ten Horses.

ALL IRON.

Frame	\$20 00
Cap Piece	20 00
Lever Stands, each	1 00
Stationary (internal gear)	15 00
Bevel Wheel	15 00
Bevel Pinion	1 00
Spur Wheels, each	5 00
Spur Wheel Journals, each	2 00
Circular or Spur Wheel Frame	5 00
Central Pinion	3 50
Central Pinion Journal	3 00
Washer under Central Pinion	50
Arch, or Roll Stand over Bevel Wheel	1 00
Roll for over Bevel Wheel	50
Friction Roll Stands, each	25
Friction Rolls, each	25
Traverse Rolls, each	25
Posts, each	50
Line Shaft Boxes, each	1 00
Line Shaft	2 00

Repairs on Planet Power, Four Horses.

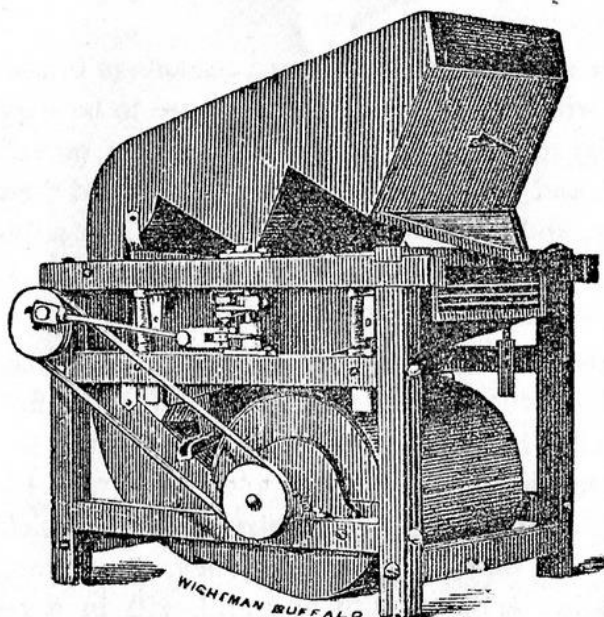
ALL IRON.

Frame	\$15 00
Cap Piece	15 00
Driving Wheel (internal gear)	12 00
Spur Wheels, each	4 00
Circle or Spur Wheel Frame	3 00
Central Pinion	2 00

See list of prices of Eight and Ten Horse Planet Power for all other parts not mentioned here.

BRAYLEY & PITTS,
MANUFACTURERS OF
B. T. TRIMMER'S
Patent Grain Separators
UPRIGHT AND HORIZONTAL
SMUT MACHINES AND BUCKWHEAT HULLERS.

Under Patent of August 3, 1855, July 27, 1858, February 14, 1860, and Sept. 23, 1862.



PATENT GRAIN SEPARATOR.

To Manufacturers of Flour.

Presuming that you are interested no less than others in all valuable improvements in the manufacture of Flour, we would invite your attention to this celebrated GRAIN SEPARATOR. Some of its more important advantages over others may be briefly enumerated :

1st. It removes all impurities, by a successive and thorough action of two important principles—the Blasts and Screens. All foreign seeds and substances, such as smut-balls, chess, oats, chaff, cockle, red-

root, rat-dirt, corn, nails, stones, etc., are entirely carried off. IT SEPARATES MORE PERFECTLY THAN ANY OTHER MACHINE EVER USED, by the grain being subjected to blasts in such manner as to separate the Oats before it reaches the Screens, and at the same time it blows out all other refuse grains. All the good grains it may blow out with the Oats are returned to the Screens, and all the good small grains are saved and separated from the Oats, and the Oats left clean for use.

2d. The Shaking Apparatus of this Separator is got up on a new and durable plan, and is not liable to break or get out of order. It can be set in a moment, at any desired angle, for working off the Oats, &c. These great objections in other machines are overcome in this. Its work is accomplished rapidly and thoroughly, economising both time and money.

3d. It lessens the labor. The great advantage it has over others is, the impurities which escape one blast are sure to be carried off by the others, while the refuse grain is carried over the movable diaphragm into a hopper, and left clean for use, the chaff and dust being carried off by the blast, and out of the mill if desired. By adjusting the movable diaphragm, the power of cleaning may be increased or diminished to any degree, at the pleasure of the operator.

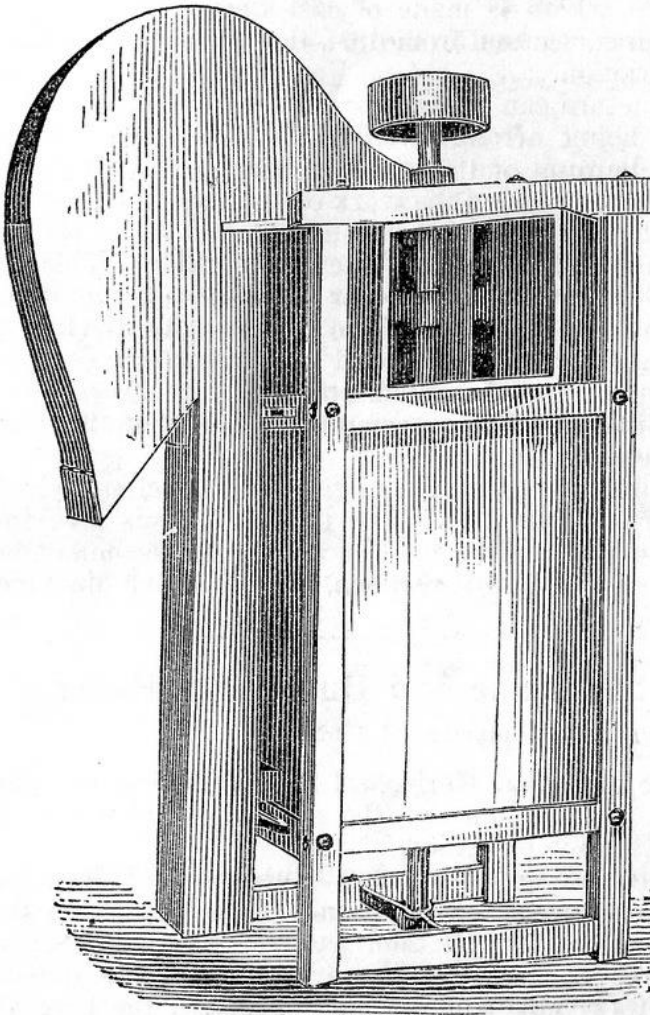
4th. It is operated with very little power, and the boxes in which it runs are so arranged that there is no danger of fire from friction, and it requires but little attention. It is constructed in a simple and durable manner, occupies but little space, and will last many years without getting out of order. It requires but little machinery to drive it. For cheapness, durability and efficiency, the Separator is without its equal. Its introduction into any mill, will in a very short time, more than repay its cost, by leaving the Oats clean for use.

Flour manufacturers who consider the saving of time, labor and expense, and wheat perfectly cleaned from oats and all impurities, and a perfect article of flour an object, will not be long without it.

The SEPARATOR promptly supplied by addressing the manufacturers.

No. 1	cleans from	150 to 200 bushels per hour.	Price, \$-----
No. 2	"	100 to 150	" " "-----
No. 3	"	75 to 100	" " "-----
No. 4	"	40 to 75	" " "-----
No. 5	"	25 to 30	" " "-----

TRIMMER'S PATENT ADJUSTABLE UPRIGHT SMUT MACHINE.



The patentee having an extensive acquaintance with the various kinds of machines offered to millers for the purpose of cleaning wheat, and knowing the imperfections of such Machines, flatters himself that he has succeeded in constructing Machines that are free from the objections existing in the various other kinds offered.

From the thorough test they have had, during a few years past, in the best mills in this and other States, and the numerous testimonials of experienced millers and mill-wrights, we confidently recommend them to millers as the best in existence, for the following reasons :

1st. This cut represents an Upright Smut Machine, recently perfected and patented. It combines the advan-

tage of scouring and separating in one operation, and in its action the many imperfections of other machines are avoided. The scouring process is constructed upon a new and durable plan. By means of beaters, on an improved method, and with an open, cast iron, indented scouring case upon the smooth-surface principle, which, by its direct action on the grain scourer removes and discharges through the open case all dust and smut that may adhere to the berry. This indented undulating case will not break wheat, nor lose its scouring qualities, as is the case with all rough surface machines.

2d. It is so constructed that the fan collects all the dust from the entire machine, and conducts it out of the mill. It can be placed in any part of the mill desired, without the least inconvenience in this respect. Being a double separator, as well as a scouring machine, it separates dust,

chaff and smut-balls from the grain before it passes to the scourer, and after it has passed the scourer it is again subjected to another sucking blast, which takes out the light refuse grains and leaves it clean for use.

3d. The scouring parts of this Machine are constructed entirely of iron and steel; the bridgetrees being of cast iron, having only one bearing besides the step, which is made of cast steel—the other one runs in a babbit metal box, secured from dust, thus being secure from all danger of fire from friction.

4th. The internal structure can be seen by means of the door, and the beaters or rubbers being arranged with adjustable screws which are easily operated, can be reset and adjusted at pleasure when found to be too much worn, thus rendering the work of the machine as good as new, and it can also be adjusted with ease to suit and scour all the different kinds and varieties of wheat in whatever condition. This peculiarity renders it far superior to all other Machines of the kind. The pulley can be put on top or bottom of the Machine for driving it.

Finally, this is without doubt, the first and only complete Upright Smut Machine in all respects ever invented, possessing less liability to get out of repair, needing no other recommendations than its own merits to bring it into general use.

In ordering this Machine, be particular to give full directions which way it is wanted to run—with or against the sun. This Machine is warranted the best in use, and to work according to recommendations, if put up and run agreeable to directions, sent with each Machine.

Horizontal Smut Machine and Buckwheat Huller.

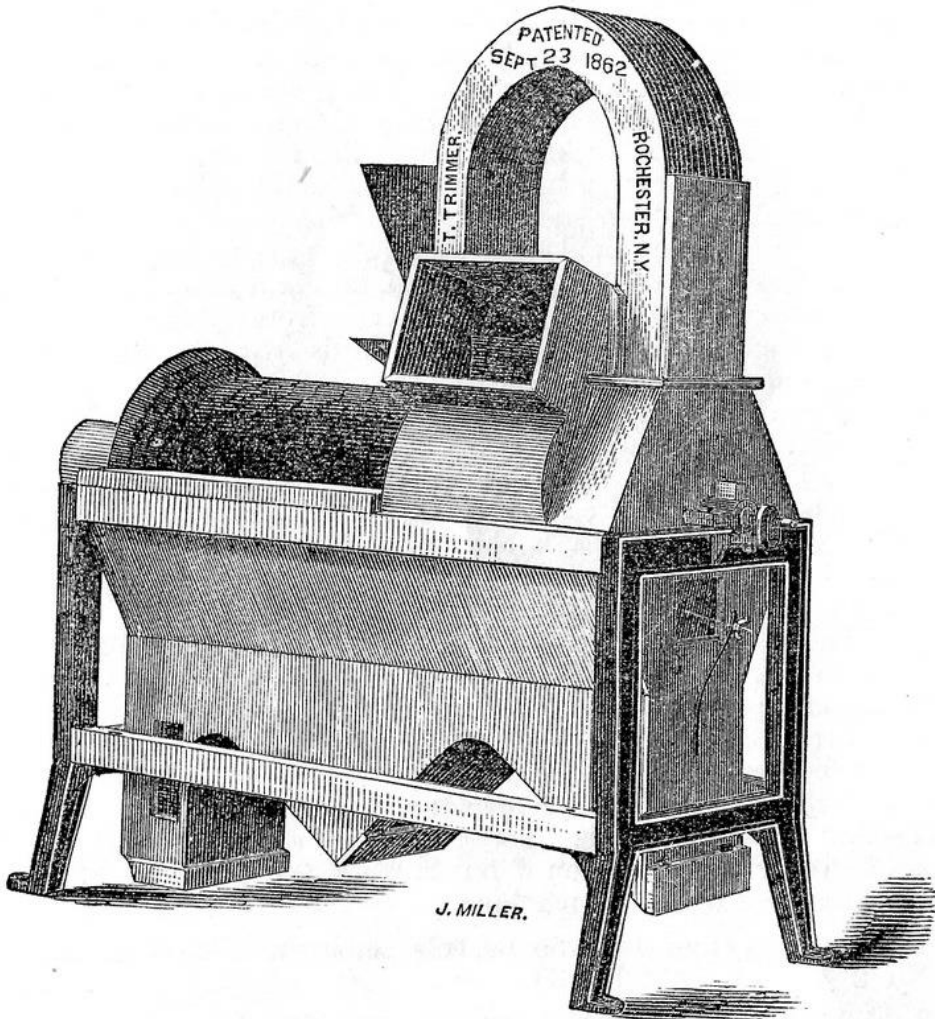
Patented September 23, 1862.

The cut on page 29 represents a Horizontal Smut Machine, recently perfected and patented. It combines all the advantages of scouring, rubbing and separating, in one operation.

1st. It is a Double Separating, as well as a Rubbing and Scouring Machine. It first separates dust, chaff, smut-balls, chess, &c., from the grain before it passes the scourers. It then passes through the screw scourers with an open, indented, cast iron scouring case on the smooth surface plan. The screws remove and discharge through the case all dust and smut that may adhere to the berry—it rubs and scours it perfectly of the blossom end and smut, and leaves it in a smooth, polished condition, **WITHOUT BREAKING THE BERRY**, and it will not lose its scouring qualities, as is the case with other smut machines. After it passes the scourers the grain is again subjected to another sucking blast, which separates all the dust and what light refuse grains may remain, leaving the wheat clean, and in the right condition to be manufactured into flour.

2d. Each separator acts independent of the other, and discharges two kinds of screenings, and both perfectly clean from dust and chaff, and leaving them in a condition to be sold or returned and ground. What screenings pass through the open case, drop into the same hopper with the other screenings, and they are also left clean.

The fan collects all dust from the machine, and from the screenings,



Horizontal Smut Machine and Buckwheat Huller.

and conducts it out of the mill if desired. The machine can be put up in any part of the mill without the least inconvenience in this respect, and they are often put up on the grinding floor.

3d. In its construction it is durable. The scouring parts are entirely of iron, and so is each end of the frame where the shaft rests, and the journals run in babbit metal boxes, secure from dust, and they can be oiled when the machine is in motion, thus avoiding all danger of fire from friction. It runs easy. The pulley may be put on either end of the shaft for driving it, as most convenient.

This, with other considerations not here named, render this Rubbing and Scouring machine most desirable in a mill, and one that has long been needed, and one that millers can not well do without, if they consider wheat thoroughly cleaned and a perfect article of Flour an object.

This cut also represents, in its outward appearance, a HORIZONTAL BUCKWHEAT HULLER, recently perfected. It combines all the advantages of Scouring, Rubbing, Hulling and Separating, in one operation.

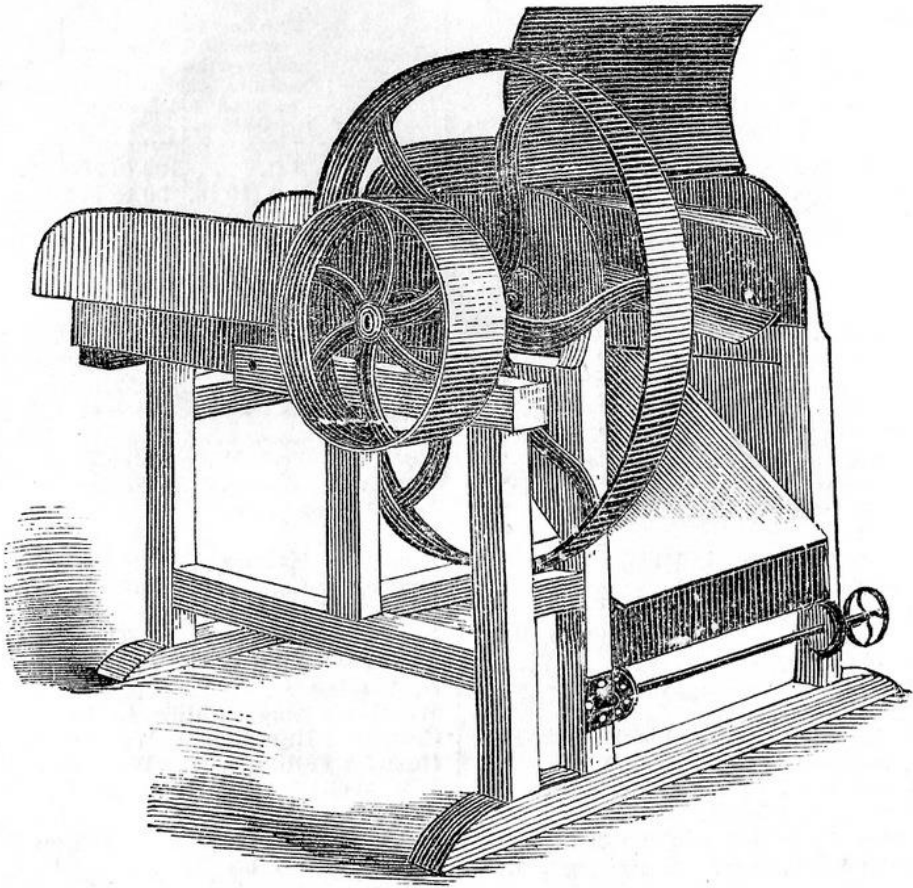
1st. The grain before it enters into scourers, is subjected to a sucking blast that takes out the dust and light refuse grains. It next passes

Dimensions of Horizontal Smut Machine.

No.	Extreme height, the first sucker added to this.	Height from where grain enters in to the machine to the floor.	Size on the floor.	Diameter of pulleys.	Height from floor to centre of pulley on the machine, on each end of shaft.	Capacity per hour. Bushels.	PRICE.
1	4 ft. 10 in.	4 ft. 3 in.	3 ft. by 5 ft. 3 in.	12 to 14 in.	3 ft.	100 to 125	
2	4 ft. 6 in.	4 ft. 10 in.	2½ ft. by 4 ft. 8 in.	9 to 10 in.	2 ft. 10 in.	50 to 75	
3	4 ft. 6 in.	4 ft.	2½ ft. by 4 ft. 2 in.	8 to 9 in.	2 ft. 10 in.	20 to 30	

REFERENCES.

Harvey Ely, -----	Rochester, N. Y.	Richard Wicher, -----	Hinkleville, N. Y.
H. Richardson & Son, --	" "	James Brown, -----	Byron, N. Y.
C. J. Hill & Son, -----	" "	Gage and Davis, -----	" "
Geo. W. Smith, Revere Mills, "	" "	C. N. Yamans, 54 Greenwich st. N.Y. City.	
Geo. S. Riley, Granite Mills, "	" "	H. Ely, -----	Erie, Pa.
Jos. Hall, -----	" "	John A. Garret, Manchester Centre, N.Y.	
James Stone, -----	" "	William W. Hanford, Jr. Scottsville, N. Y.	
Elijah Blackmore, -----	" "	Joseph Woodgate, -----	" "
George Ely, -----	" "	R. Sheffer, -----	Shortsville, N. Y.
W. Richardson, Phenix Mills, "	" "	Hon. E. B. Holmes, -----	Brockport, N. Y.
J. Frazer, -----	" "	Simpson & Co. -----	St. Catharines, C. W.
Hon. John Williams, -----	" "	Hon. T. B. Merritt, -----	" "
R. Williams, -----	Buffalo, N. Y.	Band & Hutchenson, -----	Thorold, C. W.
Benjamin Campbell, -----	" "	S. Nayhart, -----	Auburn, N. Y.
C. N. Johnson, -----	" "	H. A. King, -----	Albion, N. Y.
Philip Charles, -----	" "	Wm. Bird, Niagara Mills, Lockport, N. Y.	
R. Williams, Erie Mills, Black Rock, N. Y.		Cramer & Hamilton, -----	Weedsport, N. Y.
F. P. Harmon, -----	" "	House & Fulton, -----	Waterford, N. Y.
P. S. Bauer & Co., N. Buffalo Mills, "	" "	J. R. Wells, -----	Medina, N. Y.
S. W. Howell, Niagara Mills. "	" "	J. R. Jones, -----	Niles, Mich.
Thornton & Chester, Globe Mills, "	" "	James A. Baker, -----	Fulton, N. Y.
Mollison & Hastings, -----	Oswego, N. Y.	Stevens & Dwight, -----	" "
M. Merrick, -----	" "	Gardner & Benedict, -----	" "
Charles Smyth, -----	" "	Gilberts & Co. -----	" "
William Lewis, -----	" "	Bakus & Co. -----	" "
Robert F. Sage, -----	" "	Adams & Frazee, -----	North Rome, N. Y.
Merrick & Co., Seneca Mills, "	" "	Coe & Bingham, -----	Cleveland, O.
G. D. Smith, -----	" "	Henry Gibson, -----	Minneapolis, Min.
James W. Smith, -----	" "	T. P. White, -----	" "
Buckhout & Hastings, -----	" "	R. P. Markell, -----	Waterloo, N. Y.
S. H. Lathrop, -----	" "	McLain & Becker, -----	" "
G. A. Lathrop, -----	" "	Solomon Carman, -----	Victor, N. Y.
H. C. Wright, -----	" "	A. H. Dixon, -----	San Francisco, Cal.
S. Striker, millwright. -----	" "	John Bowman, -----	Toronto, C. W.
M. L. Crittenden & Co. -----	Albany, N. Y.	James Frazee & Co. Baldwinville, N. Y.	
E. C. Aiken, -----	" "	Wm. M. Wilkins, -----	" "
J. M. Ring, -----	" "	L. Fagin, -----	Cincinnati, O.
Isaac Crissey, -----	Troy, N. Y.	L. A. Loudon & Co. -----	" "
Bills, Thayer & Usher, -----	" "	J. P. Lathrop, -----	Le Roy, N. Y.
Hanaman & Saxton, -----	" "	W. P. Haskens, -----	" "
O. Boutwell, -----	" "	Post & Dowding, -----	Attica, N. Y.
T. M. Vail, Globe Mills. -----	" "	Slough & Talman, -----	Delaware, O.
E. W. Fairchilds, Ogdensburgh, N. Y.		Warder & Barnett, -----	Springfield, O.
H. Godden, -----	" "	Gibbart & Brother. -----	Dayton, O.
W. Arnett & Co. -----	Seneca Falls, N. Y.	William Harris, -----	" "
Edward J. Taylor, --	" "	Murray & Breed, -----	Phenix, N. Y.
Downs & Gould, -----	" "	Mary & Breed, -----	" "
L. B. Howell, -----	" "	G. N. Curtis & Co. -----	Hamilton, O.
A. G. Holmes, -----	Clifton Springs, N. Y.	A. Collins, -----	Eagle Harbor, N. Y.
Leonard Wilkins, -----	South Warsaw, N. Y.	A. O. Harrow, -----	" "



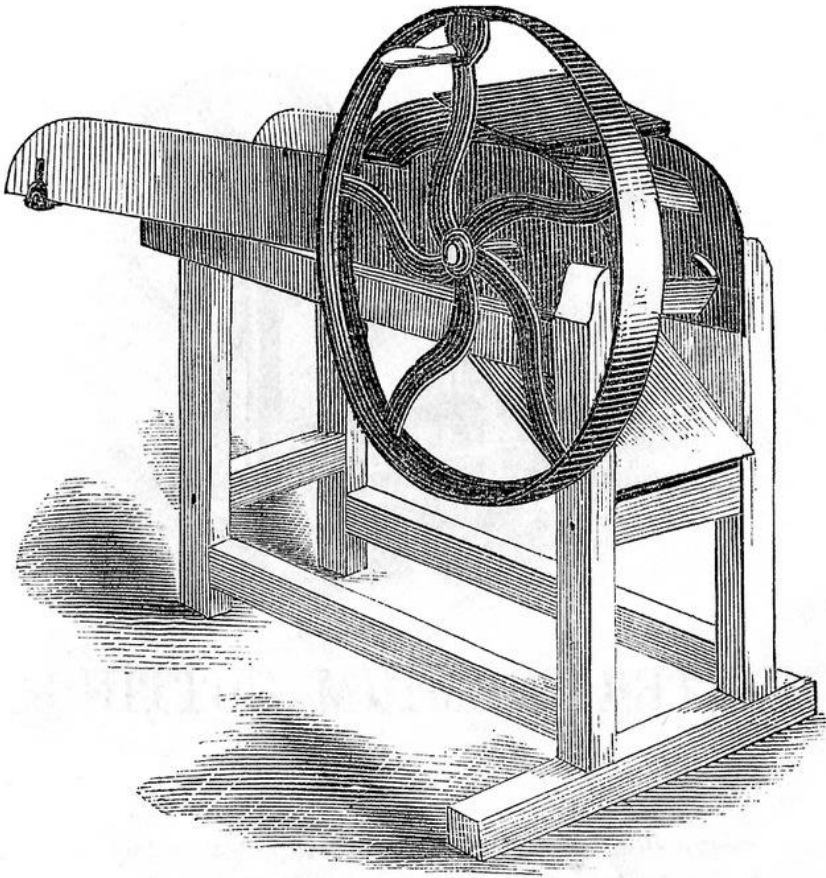
EMPIRE FEED CUTTER FOR POWER.

PATENTED 1863.

The Empire Feed Cutter took the first Premium at the Iowa State Fair, in 1860; at the St. Louis Agricultural and Mechanical Association, in 1860, and at the Monroe County (N. Y.) Fair, in 1860, silver medals; also first Premium at Monroe County Fair for 1862.

PRICES.

No. 4, Power Machine,	\$65 00
No. 5, " "	75 00



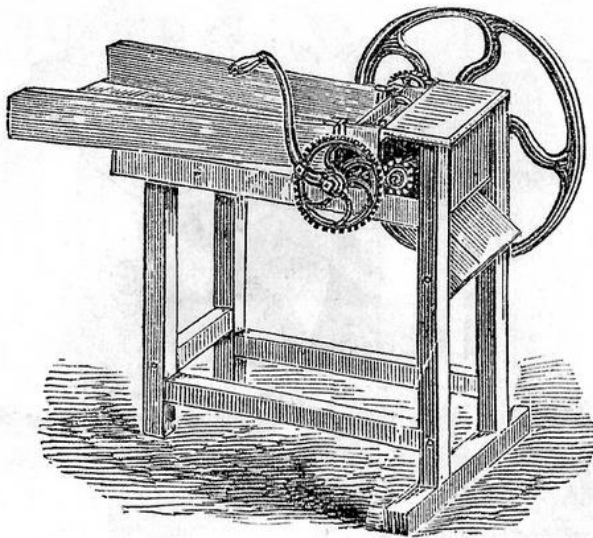
EMPIRE FEED CUTTER FOR HAND.

The above cut represents a new and improved four-knife CUTTING-Box, greatly superior to any Feed Cutter in use. Its strength, durability, compactness, self-feeding, adjustable throat and knives, ease of cut, simplicity, cutting all kinds of feed equally well, and of different lengths of cut, operated by hand or horse power, all combined, give the "Empire Feed Cutter" the decided preference over every other four-knife Cutter.

We offer them to the public with full confidence that they will give entire satisfaction. Patented 1863.

PRICES

No. 1, Hand Machine,	.....	\$20 00
No. 2, " "	.....	25 00
No. 3, " "	.....	30 00



ROCHESTER PREMIUM CUTTING BOX.

An extensive dealer in Agricultural Implements says of our Feed Cutter: "We consider it *the most perfect Cutter made*, and offer them to our friends with the greatest confidence."

Our Cutting Box is all that we claim for it—has always taken the First Premium at State and County Fairs. Its simplicity, durability, capacity for cutting any kind of fodder equally well, its one knife, all confirm it as one of the most reliable Cutting Boxes in use. As such we offer them to the trade, convinced that they will prove a leading Feed Cutter.

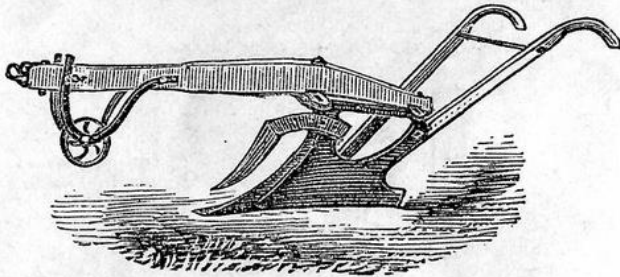
The manufacturers of this Cutting Box are the exclusive owners of the right for the United States.

This Cutting Box took the premium (a silver medal) at St. Louis Agricultural Association, in 1860.

PRICES.

No. 1, Improved, single knife, 7 inch throat,	.....	\$12 00
No. 2, " " " 9 " "	.....	\$15 00

RULOFSON & DE GARMO'S PATENT
STRAIGHT DRAUGHT PLOUGH.



The above Plough is commended by all who have tested it, as the *very best in use*. It embraces *new and valuable principles*. Its worth is attested by the fact that, although a new Plough, it has already received the **FIRST PREMIUM** wherever it has been exhibited, viz., at Yates, Schuyler and Ontario County Fairs; also at the "American Institute," New York City; also awarded the **FIRST PREMIUM**, a silver medal, at the New York State Fair, 1859.

The draught of this Plough has been tested at County and State Fairs, in competition with numberless other Ploughs, and in every instance it proved itself of the lightest draught.

It is adapted equally well to two or three horses, by a simple change of the beam from one side of the standard to the other, and possesses other valuable points, which are set forth in the following letter from a well known and highly influential farmer of Yates County.

PENN YAN, YATES COUNTY, N. Y.

SIR:—Having used your Straight Draught Plough, I must say that I am well pleased with it for the following reasons, among others: First, the ease with which the ploughman can hold it. Second, its straight and parallel draught. Third, the ease with which it is changed from a two to a three horse plough, retaining its true draught in both cases. Fourth, the mould-board being adapted to a deep or shallow, wide or narrow furrow, pulverizing the soil well, and making uniform work. You have overcome the imperfect line of draught heretofore presented to the team; the line of your plough is preserved at right angles to the shoulders of the team, because of the arrangement of the beam, as attached to the iron frame of the plough body. Fifth, its general construction is such, that it obviates the necessity of a flange on the land side, used on other ploughs.

JOHN MALLORY.

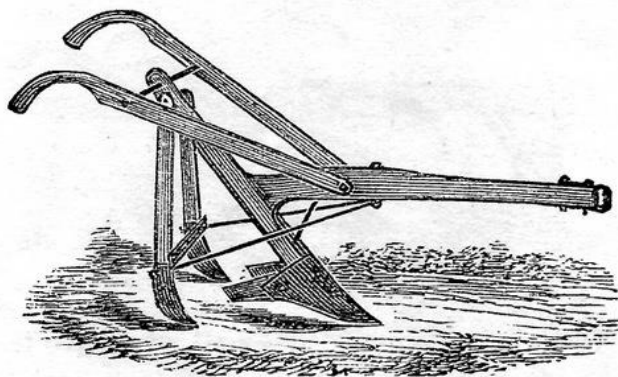
For prices, &c. address

PITTS & BRAYLEY,

Rochester Agricultural Works,

ROCHESTER, N. Y.

HYDE & WRIGHT'S PATENT HORSE HOE OR CULTIVATOR PLOUGH.



This valuable implement received the First Premium (a silver medal) at the Great National Fair, held in Chicago, September, 1859. The following are some of the advantages this Cultivator has over every other kind now in use :

1st. Lightness and durability, being made of the best quality of steel, highly polished, and the whole implement weighing from 50 to 60 lbs.

2d. Adaptation to more kinds of work than any other Cultivator known ; being a perfect and thorough Cultivator when used with all the teeth on, leaving the ground even and level, and working nearer the rows than any other Cultivator.

3d. By removing the small teeth, and attaching the wings to the shovel, it is the most perfect implement for hilling that can be found.

4th. It is the best implement for covering and digging potatoes ever invented. A man and horse can cover potatoes as fast as the horse can walk, and a man and team can dig from 300 to 500 bushels of potatoes in a day, when the crop is a fair one.

5th. It works equally well in corn, cotton, or any kind of crop requiring cultivating, and in most cases hand hoeing can be dispensed with.

6th. Its cheapness, considering the many kinds of work to which it can be applied : the farmer having in this implement all that is necessary for cultivating and hilling any kind of crop, or covering and digging potatoes.

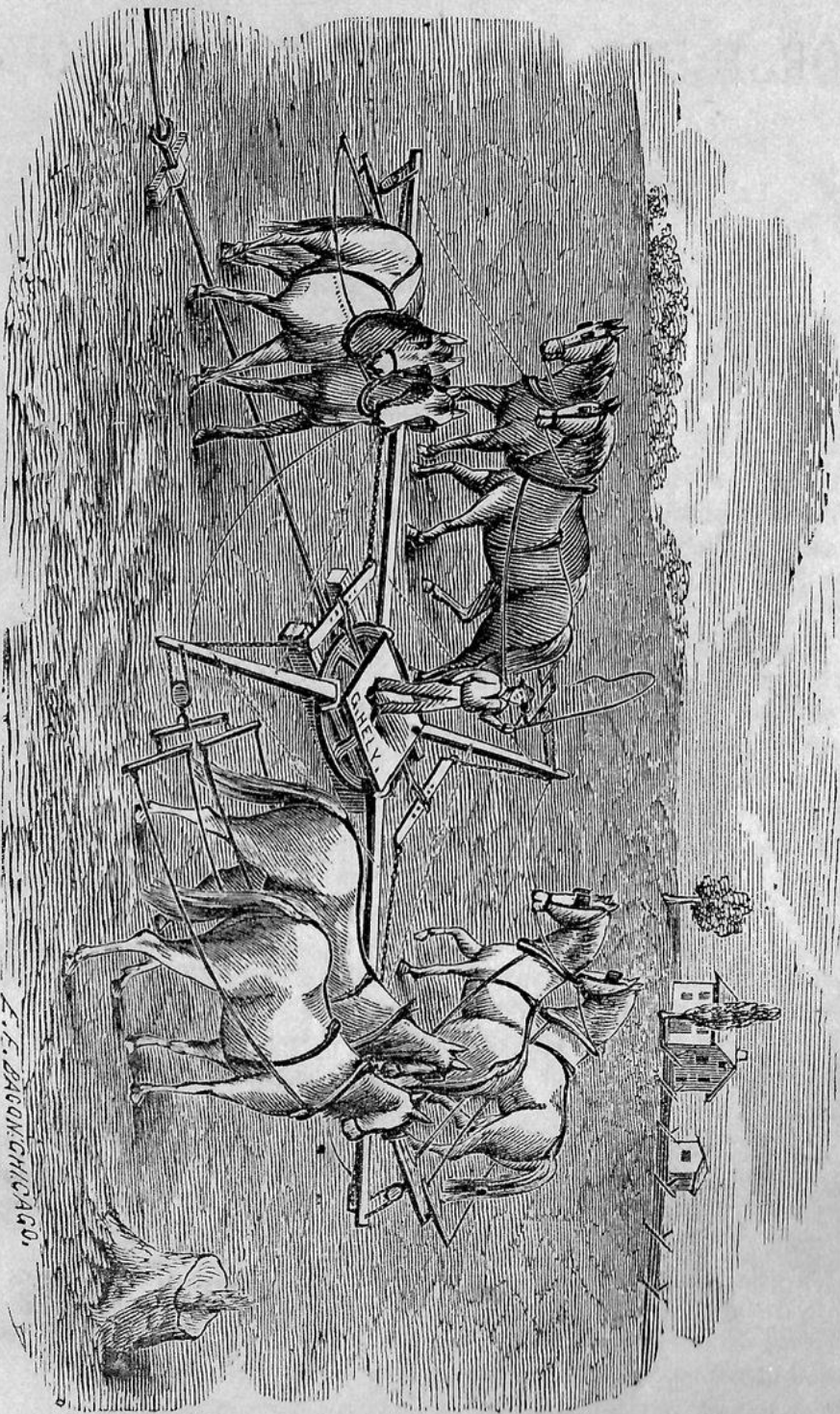
Numberless certificates from the most influential farmers in the United States, might be given of the superiority of the above implement over all others designed for like purposes ; but as the horse hoe is so well known, we deem it unnecessary to publish them.

For prices, &c. address

PITTS & BRAYLEY,

Rochester Agricultural Works,

ROCHESTER, N. Y.



HELLEY'S EQUALIZER.

E. F. BROWN CHICAGO.

The Pitts' Agricultural Works,

BUFFALO, N. Y.



BRAYLEY & PITTS, Proprietors.